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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/605,801 | 06/28/2000 | John C. Pederson | N47.2-9141 | 6033 |

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VIDAS, ARRETT & STEINKRAUS, P.A.
6109 BLUE CIRCLE DRIVE
SUITE 2000
MINNETONKA, MN 55343-9185

EXAMINER

CROSLAND, DONNIE L

ART UNIT PAPER NUMBER

2632

DATE MAILED: 11/27/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/605,801

Applicant(s)

PEDERSON, JOHN C.

Examiner

DONNIE L. CROSLAND

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoksza (already of record) et al in view of Waltz et al (already of record) and Hochstein (newly cited).

Yoksza shows the modular signal light system and includes a support having at least one module receiving port (complementary electrical jack extending from display 100, col. 3, lines 47-52, and figure 7, col. 3, lines 28-46) and at least one module 10 having at least one light emitting diode light source 22 engaged thereto, the module having at least one support engagement member in the form of an electrical jack 42 constructed and arranged to be irremovably received by the at least one module receiving port (col. 3, lines 47 et seq., col. 5, lines 4-12), the module 10 and the light emitting diode source 22 in electrical communication with one another, see the circuitry

in figure 9, and a controller (not shown) in electric communication with the support (complementary electrical jack extending from display 100), the module 10, and the light emitting diode source 22.

The controller (centrally located processing unit) are constructed and arranged to selectively activate the light emitting diodes to create at least one warning light, col. 3, lines 55-58.

Yoksza suggests in col. 2, the last line, and col. 3, lines 1-3, that the number and configuration of the LEDs 22 as well as the shape of the LED module 10 itself may be changed or varied with the various applications of LED module 10.

Yoksza further states that "the centrally located processing unit (analogous the claimed controller) of the large scale display 100 is programmed to provide commands and data to the LED module for a single pixel of the display 100. However, configurations with more than one pixel within the LED module 10 are possible", col. 3, lines 55-60.

Yoksza further states that commands and power for the entire row of LED modules with *data intended for a specific LED module being extracted from the data stream* by the processing unit 46 of that LED module, col. 4, lines 6-16.

Yoksza states in col. 2, lines 1-15, that the LEDs are lit as instructed by the received commands and data. This is "selective" as evidenced by the instructions.

Accordingly, Yoksza clearly meets the claim language "the controller constructed and arranged to selectively activate the at least one light emitting diode source to create at least one warning light signal".

"Selective" clearly reads on Yoksza commands or instructions for specific LEDs modules from the centrally located processing unit.

Accordingly, selective activation of LEDs is clearly taught by Yoksza.

Yoksza fails to suggest that the commands or instructions selectively provided to the LED modules from the controller provide variable illumination intensity to the led module.

However, Hochstein shows an LED array and provides a control signal in response to a dimming command for dimming the LED array, see col. 11, lines 25-36; see dimming in col. 12, lines 55 et seq.; col. 14, lines 43-49.

Dimming is analogous to the recited "variable illumination intensity".

It would have been obvious to one having ordinary skill in the art to control the intensity of the LED array of Yoksza because the specific use of a controller for controlling the intensity of an LED array is clearly suggested by Hochstein.

Patentable invention is not involved in varying the illumination intensity of an LED array since the specific teachings of such are suggested in the disclosure of Hochstein.

Waltz shows the selective control of an LED array in which LEDs of various colors can be selected for each display element, col. 1, lines 51-58.

Waltz suggests in col. 2, lines 32-37 that controller 16 can turn all of the diode assemblies 30 fully on, or they can be set to a partial brightness as required.

This explicit teachings of setting the LEDs to a partial brightness is analogous to the claimed "variable illumination intensity".

It is noted that claim 1 only provides that the selected LEDs illumination intensity is varied.

It should be noted that in the disclosure of Waltz, the selected LEDs illumination is varied.

Accordingly, it would have been obvious to one having ordinary skill in the art to vary the illumination intensity of the LED array of Yoksza because the use of varying the illumination intensity of an LED array is clearly suggested by Waltz.

Claims 2-20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoksza, Waltz, and Hochstein as applied to claim1 above, and further in view of Bezos, already of record.

Bezoz shows the LED array with a controller as illustrated in figure 15 and employed on a vehicle and in communication with the vehicle's power source, col. 1, lines 6-23.

Bezoz also suggests that the LED array creates a great variety of images and a light pattern of a desired shape, color and intensity can be readily defined, col. 3, lines 1-8.

It would have been obvious to one having ordinary skill in the art to combine the LED array of Yoksza as modified by Waltz and Hochstein with an emergency vehicle or a vehicle's power source because the specific use of an LED array combined with a vehicle is suggested by Bezos et al.

Also, once suggestion is made to employ an LED array in combination with a vehicle, the artisan realizes the convenience of the vehicle's power supply.

With respect to claims 3-6, see the LEDs and receiving ports of Yoksza.

With respect to claims 6-8, and 10 selective activation of the LEDs is suggested in Waltz, see the comments above.

With respect to the surfaces as recited in claim 9, as well as the limitations as recited in claims 11-15, 19, and 20, see the distinct surfaces in figures 1, 2, and 4 of Bezos, and col. 2, lines 49 et seq., col. 3, lines 1-8.

With respect to claim 18, the LED array of Bezos is mounted on the surface of the vehicle, see col. 1, lines 25-33. Bezos also discusses in col. 9, lines 52-56 planar arrays of LEDs.

With respect to claims 16 and 17, Bezos suggests in col. 2, lines 4-7, that the light pattern may comprise a variety of images and the light pattern of a desired shape, color, and intensity can be readily defined. In col. 7, lines 44-47, Bezos discusses a beam pattern in terms of shape and illumination. Bezos discusses a variable pulse source 234 to provide different flashing rates for different situations, col. 9, lines 38-47.

Accordingly, it is submitted that the claimed creation of warning signals in the group as recited in these claims for instance a simulated revolving light, etc. are clearly within the suggested teachings of Bezos LED array creating a pattern of light of desired shape, color, and intensity.

Accordingly, patentable invention is not involved in creating the various patterns as recited, such being a matter of choice as determined by design.

Response to Arguments

Applicant's arguments filed 8-27-01 have been fully considered but they are not persuasive. Applicant's argument regarding the controller arranged to provide variable illumination intensity are note but not persuasive in view of the explicit teaching of the dimming command in Hochstein. Intensity definition of an LED array is also suggested in Waltz as discussed above.

Conclusion

The prior art to Banks (controller for controlling the LED array intensity, col. 6, lines 54 et seq., col. 7, lines 15-40) is made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DONNIE L. CROSLAND whose telephone number is (703) 305-4388. The examiner can normally be reached on Mon-Fri, 9:30a-6:00p.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A Hofsass can be reached on (703) 305-4717. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-9051 for regular communications and (703) 308-9052 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

dlc

November 8, 2001



DONNIE L. CROSLAND
PRIMARY EXAMINER